

PROPOSED AMENDMENTS TO THE CAP-AND-TRADE REGULATION and Compliance Offset Protocols

California Air Resources Board
June 25, 2015

Presentation Outline

- Cap-and-Trade Program Implementation Update
- Offset Program Overview
- Regulatory Timeline and Public Process
- Proposed Amendments to the Cap-and-Trade Regulation
- CEQA Environmental Analysis
- Staff Recommendation

Program Implementation Update

- Jan. 1, 2013: first time GHG emissions have a compliance obligation
- January 1, 2014: linked with Québec
- Nov. 1, 2014: first annual compliance deadline
 - 30% of 2013 emissions
- January 1, 2015: fuels and natural gas suppliers phased into the program
- Nov. 2, 2015: first Compliance Period surrender deadline
 - 70% of 2013 emissions and 100% of 2014 emissions

ARB Compliance Offsets

- Cost-containment mechanism
- Spur voluntary emission reductions in sectors not covered by the program
- Encourage the spread of clean, low carbon technologies inside and outside of California
- Provide environmental, social, and economic benefits
- Reductions must meet AB 32 criteria
 - Real, additional, permanent, quantifiable, verifiable, and enforceable
 - Additional = beyond regulation or what would otherwise occur

Offset Program Overview

- First ARB offsets issued September 2013
- 20 million ARB compliance offsets issued to date
 - 125 individual projects
 - 1.7 million offsets used to meet compliance obligations in November 2014 (~4% of total instruments surrendered)
- 100 ARB-accredited verifiers trained
 - 18 offset verification bodies accredited
- Three Offset Project Registries approved
- One new and three revised protocols adopted by the Board since 2011

Offset Program Overview 2

- ARB currently audits 100% of projects
 - Ensure program integrity
 - Protect stakeholder investment
- Early action forest project status
 - Adding and redirecting staff resources to address early action projects

Previous Board Direction for Proposed Amendments

- Resolution 10-42:
 - Initiate a public process to review additional Compliance Offset Protocols
- Resolution 11-32:
 - Monitor offset protocol development and propose technical updates to adopted offset protocols, as needed
- Resolution 14-44:
 - Evaluate all comments received during the public comment periods, make appropriate conforming modifications to the Regulation and protocols, and prepare written responses to environmental comments

Proposed Amendments:

- Add a new Compliance Offset Protocol for Rice Cultivation Projects
- Add an updated Compliance Offset Protocol for U.S. Forest Projects
- Process for transitioning early action offset credits issued to voluntary rice projects

Regulatory Timeline

- October 28, 2014– Staff released proposed amendments to the regulation with formal 45-day comment period
- December 18, 2014 – Board Hearing:
 - Staff directed to make appropriate modifications
- May 20, 2015 – Staff released 15-day changes after public workshop
- June 15, 2015 – Staff posted responses to environmental comments for Board consideration
- June 25, 2015 – Board Hearing
- Anticipated effective date late 2015 with release of updated guidance documents

New Compliance Offset Protocol for Rice Cultivation Projects

- First crop-based offset protocol considered by ARB
- Conventional rice cultivation practices serve ecological functions as man-made wetlands; but enhance methane production and emissions
- Rice Cultivation Protocol uses a De-Nitrification De-composition (DNDC) model to quantify greenhouse gas emissions
- Incentivizes modified practices that maintain yields and preserve ecological benefits
- Potential offset supply of 0.5 – 3 MMTCO₂e through 2020

New Compliance Offset Protocol for Rice Cultivation Projects

- 6 major rice-producing states: AR, CA, LA, MS, MO, & TX
- Protocol promotes practices that reduce methane emissions from rice cultivation
 - California Rice Growing Region
 - Switch from wet seeding to dry seeding
 - Early drainage in preparation for harvest
 - Mid-South Rice Growing Region (AR, LA, MS & MO)
 - Cyclical wetting and drying of rice fields during the growing season
 - Early drainage in preparation for harvest

New Compliance Offset Protocol for Rice Cultivation Projects

15-day Changes

- Provides more detailed methods for calculating mean soil properties from SSURGO and STATSGO2 data
- Allows the uses of weather station-based reanalysis products to be used in all cases for obtaining weather data
- Requires field specific crop yield calibration for the previous practice as well as once for each reporting period to improve DNDC accuracy
- Reduces the maximum number of DNDC runs

New Compliance Offset Protocol for Rice Cultivation Projects

- Proposed support for project implementation
 - Adjusted structural uncertainty value to conservatively simplify emission reduction calculations
 - Develop web-based tool that reduces emissions modeling complexity for project operators due in October 2015 with a target of January 2016 for the final version
 - Create a pilot program to evaluate verification options
 - Funded by ARB
 - Goal to identify lower cost verification methods
- Annual Board update on status of all adopted protocols
 - Project location and implementation data will be made available for all stakeholders

Updates to Existing Compliance Offset Protocol for U.S. Forest Projects

- Expands project eligibility to parts of Alaska*
- Updates Common Practice
 - US Forest Services updates every 5 years
- Updates calculation for Minimum Baseline Level
 - Refinement to the definition of Logical Management Unit (LMU)*
 - Consistent with voluntary market protocols
- Provides clarification on even-aged management requirements
 - Clarifies requirements to ensure alignment with the California Forest Practice Rule*

U.S. Forest Protocol

Additional 15-Day Changes

- Additional factors to help define comparable sites for determining the financial feasibility of baseline growth and harvesting regimes
- Limits required corrections to a previously established baseline to errors greater than five percent
- Allows public lands to use modeling to help define the baseline
- Allows paired sequential sampling even if up to 10% of monumented plots cannot be identified

Public Process for Proposed Amendments

- 4 public workshops
- 4 Rice Cultivation Protocol working group meetings
- 1 webinar on updates to U.S. Forest common practice values
- Publicly released discussion drafts
- 2 informal public comment periods
- Proposed regulatory package released for formal comment period in October 2014
- Numerous informal meetings with individual stakeholders
- 15-day regulatory package released for formal comment period May 2015

Environmental Analysis

- Environmental Analysis (EA) prepared for each of the Proposed Compliance Offset Protocols.
- CEQA Appendix G (Environmental Checklist) used to identify and evaluate environmental resource areas that may be impacted.
- Conclusions:
 - No significant adverse impacts from the new Rice Protocol.
 - Same impacts from the updated Forest Protocol as original Protocol analyzed in 2010, but with extended geographic scope by expanding project eligibility to areas of Alaska.

Staff Recommendation

- Approve the proposed Resolution which includes:
 - Approval of written responses to environmental comments
 - Adoption of CEQA Findings and Statement of Overriding Considerations
 - Adoption of Final Regulation Order
 - Adoption of Compliance Offset Protocols U.S. Forest and Rice Cultivation Projects
- The proposed Resolution also directs the Executive Officer to:
 - Finalize the Final Statement of Reasons and submit the completed regulatory package to the Office of Administrative Law